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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/101,049	10/29/98	LEDUC M	G-31

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EXAMINER	
GRAYBILL,D	
ART UNIT	**PAPER NUMBER**
2814	

DATE MAILED: 04/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/101,049	Leduc et al.
Examiner	**Group Art Unit**
David E. Graybill	2814

☒ Responsive to communication(s) filed on *20 May 1999*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-24* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-9* is/are rejected.

☒ Claim(s) *10-24* is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Claims 10-24 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following terms lack sufficient literal antecedent basis:

Claim 1, "the plane of the carrier substrate";

Claim 2, "whose outer size," and "whose end terminals";

Claims 7-9, "the connection terminals";

Claim 9, "the side of the module (6) with no antenna," "the connection terminals," and "said connection terminals."

In claims 2, 4 and 5 it is not clear if the

claimed narrower ranges "preferably in the region of 12 mm," "preferably approximately 12 mm," and "preferably approximately 12 mm" are limitations.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fidalgo (5598032).

At column 3, line 29 to column 4, line 51 Fidalgo teaches a carrier substrate 3 for an electronic microcircuit 8 being connectable to an antenna 5 to enable contactless operation of a module 3 characterized in the whole of the antenna is arranged on the module and comprises turns made in the plane of the substrate; and the microcircuit is placed on the same side of the module as the antenna astride its turns, the connection terminals 5 of the antenna being connected to contact pads 15 of the module and of the microcircuit via conductor leads 24, and an insulator 14 being placed between the microcircuit and the antenna zone under the microcircuit.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo (5598132).

Fidalgo is applied as it is applied to claim 1 and is further applied infra.

As cited, Fidalgo teaches that the antenna is made up of a spiral having three turns, an outer size, an outer side measurement, and a square outer shape. However, Fidalgo does not appear to explicitly teach that the spiral has approximately six turns. Nonetheless, as cited, Fidalgo teaches, "the number of turns is given solely by way of an indication." Moreover, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and optimization to choose the particular claimed turn range limitation because applicant has not disclosed that the limitation is for a particular unobvious purpose, produces an unexpected result, or is otherwise critical, and it appears prima facie that the product would possess utility using another turn range. Indeed, it has been held that optimization of range limitations are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical.

Similarly, although Fidalgo does not appear to explicitly teach the other claimed dimensional limitations, it would have been an obvious matter of design choice bounded by well

known manufacturing constraints and ascertainable by routine experimentation and optimization to choose these particular dimensions because applicant has not disclosed that the dimensions are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical, and it appears prima facie that the product would possess utility using another dimension. Moreover, it has been held that limitations directed to size and configuration are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Claims 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo as applied to claims 1 and 3, and further in combination with Gustafson (EP0620537).

Although, as cited, Fidalgo teaches that "the antenna 5 can have any geometrical configuration," Fidalgo does not appear to explicitly teach that the outer shape of the spiral is substantially circular or oval. Nevertheless, in "Fig. 1" at "21," and in "Fig. 2" at "30B," Gustafson teaches a substantially circular and oval, respectively, antenna spiral. In addition, it would have been obvious to combine the product of Gustafson with the product of Fidalgo because it would facilitate provision of an antenna. In any case, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and optimization to choose these particular shapes because applicant has

not disclosed that the shapes are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical, and it appears prima facie that the product would possess utility using another shape. Again, it has been held that limitations directed to size and configuration are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Also, Fidalgo does not appear to explicitly teach that the microcircuit is placed in the center of the antenna. Regardless, in "Fig. 1" Gustafson teaches this product. Furthermore, it would have been obvious to combine the product of Gustafson with the product of Fidalgo because it would reduce unwanted interaction between the chip and the antenna.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo as applied to claim 1, and further in combination with Ohno (5773880).

Fidalgo does not appear to explicitly teach that the microcircuit is placed on the side of the module with no antenna, the connection terminals being connected to contact pads of the microcircuit via conductor leads crossing over wells made in the carrier substrate at the level of the connection terminals. Notwithstanding, at column 2, line 66 to column 3, line 13; column 4, lines 16-22; and column 5, line 62 to column 6, line 2 Ohno teaches that a microcircuit 12 is

placed on the side of a module 10 with no antenna, the connection terminals 33 being connected to contact pads of the microcircuit via conductor leads crossing over wells 36 made in the carrier substrate at the level of the connection terminals. Moreover, it would have been obvious to combine the product of Ohno with the product of Fidalgo because it would facilitate production of a non-contact card.

Any telephone inquiry of a general nature or relating to the status (MPEP 203.08) of this application or proceeding should be directed to the group receptionist at (703) 308-1782.

Any telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (703) 308-2947. Regular office hours: Monday through Friday, 8:30 a.m. to 6:00 p.m..

The fax phone number for group 2800 is (703)305-3431.

David E. Graybill
Primary Examiner
Art Unit 2814

D.G.